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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/773,724	02/06/2004	Shrinivas Ashwin	MS306987.01 / MSFTP619US	8320
27195 7590 05/18/2007 AMIN, TUROCY & CALVIN, LLP 24TH FLOOR, NATIONAL CITY CENTER 1900 EAST NINTH STREET CLEVELAND, OH 44114			EXAMINER FLEURANTIN, JEAN B	
			ART UNIT 2162	PAPER NUMBER
			MAIL DATE 05/18/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/773,724	Applicant(s) ASHWIN ET AL.	
	Examiner JEAN B. FLEURANTIN	Art Unit 2162	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 April 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13, 23 and 26-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13, 23 & 26-28 is/are rejected.
- 7) ☒ Claim(s) 29 and 30 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 04/23/07 has been entered.

The following is the current status of claims:

Claims 14-22 and 24-25 have been withdrawn.

Claims 1-13, 23 and 26-30 remain pending for examination.

The specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 11-13 are rejected under 35 U.S.C.102(b) as being anticipated by U.S., Patent 5,974,416 issued to Anand et al., ("Anand").

As per claim 11, Anand discloses "a computer-implemented system that facilitates communication in client/server networks" (i.e., client and server are connected through a network; see col. 5, lines 12-2 and Fig. 1) comprising

"a server in communication with a client via a tabular data stream (TDS) protocol in a network environment" (i.e., a tabular data stream, in which a client and server connecting through a network; see col. 2, lines 3-10 and col. 4, lines 25-32 and Fig. 1); and

"the TDS protocol comprising a query notification header with a data field" (In light the specification at paragraph [0013], the purposed of querying notification header is for providing future updates. The method for tracking the updates to the format of adtg messages is disclosed by Anand, col. 8, lines 12-22) "that requests updates related to a query at a time the communication is initially established" (i.e., requests data from a database, which the script or application issues a query sending across the internet (network) to the server; see col. 5, lines 15-20), "to facilitate communication between the server device and the client device" (i.e., client and server are connected through a network; see col. 5, lines 12-20 and Fig. 1), "the updates comprise information associated with at least a change to the query" (i.e., recreating rowsets containing the data that satisfies the client query; see col. 7, lines 60-61).

As per claim 12, Anand discloses "the query notification establishes channels and setup for the updates sent by the server to the client device" (In light the specification at paragraph [0013], the

purposed of querying notification header is for providing future updates. The method for tracking the updates to the format of adtg messages is disclosed by Anand, col. 8, lines 12-22).

As per claim 13, in addition to claim 11, Anand discloses "the query notification header enables at least one of an infrastructure component that can facilitate development of caching layers on top of SQL server applications or the creation of middle tier type caches that remain transparent to the client device" (i.e., as the application layer, invoking to perform a database query; see col. 2, lines 44-55).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-2, 4-9, 23 and 26-28 are rejected under 35 U.S.C.103(a) as being unpatentable over U.S., Patent 5,974,416 issued to Anand et al., ("Anand") in view of "Database Buffer Size Investigation for OLTP Workloads" issued to Tsuei et al., ("Tsuei").

As per claim 1, Anand discloses "a computer-implemented system to facilitate communication between client device and a server device networks" (i.e., client and server are connected through a network; see col. 5, lines 12-2 and Fig. 1) comprising:

"a multiple active result set (MARS) header" (In light the specification at paragraph [0010], the purposed of supporting a Multiple Active Result Sets (MARS) feature, including a data field header is for identifying pending requests. The method for processing requests data from a database, which script or application issues a query sending across the internet to the server; see col. 5, lines 15-20), and

"a data field that is part of the MARS header" (In light the specification at paragraph [0010], the purposed of supporting a Multiple Active Result Sets (MARS) feature, including a data field header is for

identifying pending requests. The method for processing requests data from a database, which the script or application issues a query sending across the internet to the server; see col. 5, lines 15-20) and "identifies a number of pending requests known the a client device to the server device" (In light the specification at paragraph [0031], the purposed of identifying pending requests is for identifying a number of requests known by a client to a server. The method for processing requests data from a database, which application issues a query sending across the internet to the server is disclosed by Anan, col. 5, lines 15-20), "the MARS header is employed to synchronize execution of queries for communication between the client device and the server device" (i.e., client and server, querying marshaling (synchronizing) across the internet, database interfacing application processing interface queries (the execution queries) the database system and retrieving the rows (data); see col. 7, lines 45-58).

Anand fails to explicitly disclose based at least in part on the number of pending request known by the client device regardless of buffer size for the client device and the server device. However, Tsuei discloses based at least in part on the number of pending request known by the client device (see Tsuei page 114, col. 1, paragraph [3]) and buffer size for the client device and the server device (see Tsuei page 112, col. 2, last paragraph). It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the system of Anand by the number of pending request known by the client device and buffer sizing as disclosed by Tsuei (see Tsuei Figs. 2 and 3). Such a modification would allow the system of Anand to provide estimate the optimal memory buffer size for a given configuration (see Tsuei page 118, col. 1, last paragraph), therefore, improving the accuracy and the reliability of the enhanced tabular data stream protocol.

As per claim 2, Anand discloses "the TDS protocol further comprises a transaction descriptor header that enables a plurality of active transactions under a single session" (In light the specification at paragraph [0010], the purposed of supporting a Multiple Active Result Sets (MARS) feature, including a data field header is for identifying pending requests. The method for processing requests data from a database, which script or application issues a query sending across the internet to the server is disclosed by Anand, col. 5, lines 15-20).

As per claim 4, Anand discloses "the TDS protocol further comprises an environmental change event feature that is sent to the client when a transactional state of the server changes" (i.e., allowing server to apply client updates; see col. 9, lines 64-66).

As per claim 5, Anand discloses "the state of server changes when a connection is reset to another server as part of a data base mirror environment" (In light the specification at paragraph [0032], the purposed of changing state is for resetting component, which can send back information about a transaction change. The method for recreating rowsets is for updating the database is disclosed by Anand, col. 7, lines 60-64 and Fig. 5).

As per claim 6, Anand discloses "the client cancels a command being currently executed via transmittal of a non severe attention signal without a connection drop of the communication" (In light the specification at paragraph [0040], the purposed of canceling (interrupting) a current command without affecting transaction by sending a non severe attention (NSA) signal is for canceling a specific request. The method for requests data from a database, which application issuing a query sending across the internet to the server, where it is interpreted by the server process is disclosed by Anand, col. 5, lines 15-20).

As per claim 7, Anand discloses "the client executes a remote procedure call on the server" (i.e., client accessing the server, querying sending call requesting execution; see col. 2, lines 22-24).

As per claim 8, Anand discloses "the client requests a connection to enlist in a distributed transaction coordinator (DTC)" (i.e., client processing requests data by issuing a query across the internet; see col. 5, lines 15-20).

As per claim 9, Anand discloses "the TDS protocol enables a change of order for parameters is for outputting from the server" (In light the specification at paragraph [0033], the purposed of changing order is for re-order component for outputting parameters. The method for ordering column ordinals (components), which identify positions in the result set (outputting parameters) is disclosed by Anand, col. 21, lines 58-60), and "retrieval of parameters from an application programming interface (API) of the network environment" (i.e., application programming interface (API) providing interfaces for executing (retrieving) applications across a network; see col. 10, lines 15-17).

As per claim 23, Anand "computer-implemented system to facilitates communication between client device and a server device networks" (i.e., client and server are connected through a network; see col. 5, lines 12-2 and Fig. 1) comprising;

means for issuing a query by a client device" (i.e., client issuing a query; see col. 7, lines 46-47);

"means for processing the query by a server device" (i.e., query processing (running) by the server; see col. 7, lines 48-49 and Fig. 4); and

"means for sending the query results to the client device such that the client device and server device are synchronized" (i.e., client and server, querying marshaling (synchronizing) across the internet, database interfacing application processing interface queries (the execution queries) the database system and retrieving the rows (data); see col. 7, lines 45-58).

Anand fails to explicitly disclose based at least in part on the number of pending request known by the client device regardless of a buffer size of the computing system. However, Tsuei discloses based at least in part on the number of pending request known by the client device (see Tsuei page 114, col. 1, paragraph [3]) regardless of a buffer size of the computing system (see Tsuei page 112, col. 2, last paragraph). It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the system of Anand by based at least in part on the number of pending request known by the client device regardless of a buffer size of the computing system as disclosed by Tsuei (see Tsuei Figs. 2 and 3). Such a modification would allow the system of Anand to provide estimate the

optimal memory buffer size for a given configuration (see Tsuei page 118, col. 1, last paragraph), therefore, improving the accuracy and the reliability of the enhanced tabular data stream protocol.

As per claims 26-28, the limitations of claims 26-28 are similar to claims 1-10, therefore, the limitations of claims 26-28 are rejected in the analysis of claims 1-10, and these claims are rejected on that basis.

Claims 3 and 10 are rejected under 35 U.S.C.103(a) as being unpatentable over U.S., Patent 5,974,416 issued to Anand et al., ("Anand") in view of "Database Buffer Size Investigation for OLTP Workloads" issued to Tsuei et al., ("Tsuei") as applied to claims 1-13, 23 and 26-28 above, and further in view of U.S. Pat. No. 6,356,946 issued to Clegg et al., ("Clegg").

As per claim 3, in addition to claim 1, Anand substantially discloses the subject matter of the invention, except a chunk format component that employs a partially Length Prefix (PLP) format to transmit data between the client device and the server device. However, Clegg discloses except a chunk format component that employs a partially Length Prefix (PLP) format to transmit data between the client device and the server device (see Clegg col. 11, lines 26-31 and Fig. 3). It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the system of Anand by except a chunk format component that employs a partially Length Prefix (PLP) format to transmit data between the client device and the server device as disclosed by Clegg (see Clegg col. 15, lines 7-12). Such a modification would allow the system of Anand to provide more efficient serialization (see Clegg col. 11, lines 23-24), therefore, improving the accuracy and the reliability of the enhanced tabular data stream protocol.

As per claim 10, in addition to claim 1, Anand substantially discloses the subject matter of the invention, except specifies a new password as part of a login procedure when an old password is presented. However, Clegg discloses specifies a new password as part of a login procedure when an old password is presented (see Clegg col. 14, line 25 to col. 15, line 18). It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the system of Anand by specifies a new password as part of a login procedure when an old password is presented as disclosed by Clegg (see Clegg col. 15, lines 7-12). Such a modification would allow the system of Anand to provide support for login capability negotiation (see Clegg col. 6, line 65 to col. 7, line 3), therefore, improving the accuracy and the reliability of the enhanced tabular data stream protocol.

Claim Objections / Allowable Subject Matter

Claims 29 and 30 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Applicant' Remarks

Applicant's arguments, filed 04/23/07, with respect to the rejection(s) of claim(s) 1-13, 23 and 26-30 under U.S.C. 103(a) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Tsuei.

Claims as amended overcome the 35 U.S.C. 101 rejections. Thus, the U.S.C. 101 rejections of claims have been withdrawn.

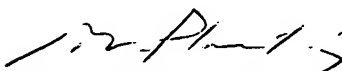
The broadest reasonable interpretation of the claims must also be consistent with the interpretation that those skilled in the art would reach. In re Cortright, 165 F.3d 1353, 1359, 49 USPQ2d 1464, 1468 (Fed. Cir. 1999). For the above reasons, it is believed that the last Office Action was proper.

CONTACT INFORMATION

2. Any inquiry concerning this communication or earlier communications from the examiner should be directed to JEAN B. FLEURANTIN whose telephone number is 571-272-4035. The examiner can normally be reached on 7:05 to 4:35.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, JOHN E BREENE can be reached on 571-272-4107. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Jean Bolte Fleurantin

Patent Examiner

Technology Center 2100

May 07, 2007